## **KENTUCKY**

## **Science and Engineering Profile**

|                                     | Kentucky | U.S.        | Rank |  | Kentucky | U.S.      | Rank |
|-------------------------------------|----------|-------------|------|--|----------|-----------|------|
|                                     |          |             |      |  |          |           |      |
| Doctoral scientists, 1993           | 3,780    | 430,332     | 32   | Total R&D performance, 1993 (millions)   | \$429    | \$161,427 | 38   |
| Doctoral engineers, 1993            | 360      | 81,293      | 39   | Industry R&D, 1993 (millions)            | \$289    | \$117,622 | 35   |
| S&E doctorates awarded, 1995        | 198      | 26,482      | 33   | Academic R&D, 1994 (millions)            | \$126    | \$20,573  | 35   |
| of which, in life sciences          | 37%      | 24%         |      | of which, in life sciences               | 74%      | 55%       |      |
| in social sciences                  | 19%      | 15%         |      | in engineering                           | 15%      | 16%       |      |
| in psychology                       | 16%      | 13%         |      | in physical sciences                     | 3%       | 10%       |      |
| S&E postdoctorates, 1994            |          |             |      | Higher education current-fund            |          |           |      |
| in doctorate-granting institutions  | 230      | 36,143      | 30   | expenditures, 1993 (millions)            | \$1,831  | \$163,994 | 29   |
| S&E graduate students, 1994         |          |             |      | Number of SBIR awards, 1990-94           | 28       | 18,023    | 42   |
| in doctorate-granting institutions  | 3,487    | 438,694     | 34   | Patents issued to state residents, 1995  | 272      | 55,717    | 34   |
| Population, 1995 (000s)             | 3,860    | 262,755     | 24   | Gross state product, 1992 (billions)     | \$75.6   | \$5,994.1 | 25   |
| Civilian labor force, 1995 (000s)   | 1,861    | 132,281     | 25   | of which, agriculture                    | 3%       | 2%        |      |
| , ,                                 |          |             |      | manufacturing, mining, construction      | 32%      | 23%       |      |
| Personal income per capita, 1995    | \$18,612 | \$22,788    | 44   | transportation, communication, utilities | 9%       | 9%        |      |
|                                     |          |             |      | wholesale and retail trade               | 15%      | 16%       |      |
| Federal spending                    |          |             |      | finance, insurance, real estate          | 14%      | 18%       |      |
| Total expenditures, 1995 (millions) | \$19,991 | \$1,326,294 | 23   | services                                 | 14%      | 20%       |      |
| R&D obligations, 1994 (millions)    | \$89     | \$65,654    | 41   | government                               | 13%      | 12%       |      |
|                                     |          |             |      |  |          |           |      |

Rankings and totals are based on data for the 50 States and D.C.

Data on S&E postdoctorates and S&E graduate students include health fields.

## Federal Obligations for Research and Development in Kentucky by Agency and Performer: Fiscal Year 1994

[Thousands of dollars]

|                                  | Total  | Federal<br>intramural | All<br>FFRDCs | Industrial<br>firms | Universities & colleges | Other nonprofits | State & local government | State rank |
|----------------------------------|--------|-----------------------|---------------|---------------------|-------------------------|------------------|--------------------------|------------|
| Total, all agencies              | 88,635 | 8,049                 | 0             | 14,159              | 63,939                  | 262              | 2,226                    | 42         |
| Department of Agriculture        | 11,263 | 1,495                 | 0             | 0                   | 9,768                   | 0                | 0                        | 38         |
| Department of Commerce           | 68     | 0                     | 0             | 1                   | 67                      | 0                | 0                        | 44         |
| Department of Defense            | 7,561  | 4,746                 | 0             | 1,400               | 1,415                   | 0                | 0                        | 45         |
| Department of Energy             | 18,490 | 0                     | 0             | 11,935              | 6,480                   | 0                | 75                       | 27         |
| Dept. of Health & Human Services | 39,287 | 0                     | 0             | 821                 | 37,557                  | 262              | 647                      | 31         |
| Department of the Interior       | 2,354  | 1,808                 | 0             | 0                   | 296                     | 0                | 250                      | 45         |
| Department of Transportation     | 1,240  | 0                     | 0             | 0                   | 66                      | 0                | 1,174                    | 41         |
| Environmental Protection Agency  | 526    | 0                     | 0             | 0                   | 446                     | 0                | 80                       | 40         |
| Nat'l Aeronautics & Space Admin. | 1,479  | 0                     | 0             | 0                   | 1,479                   | 0                | 0                        | 43         |
| National Science Foundation      | 6,367  | 0                     | 0             | 2                   | 6,365                   | 0                | 0                        | 42         |
|                                  |        |                       |               |                     |                         |                  |                          |            |
| State rank                       | 42     | 49                    | na            | 41                  | 33                      | 50               | 34                       |            |

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable